



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

June 10, 2003

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

RE: **AM General Corporation**

MSM 141-16912-00031

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

FNPERMOD.wpd 8/21/02

June 10, 2003

Mr. Ricky Smith
AM General Corporation
13200 McKinley Highway
Mishawaka, Indiana 46545

Re: 141-16912
Minor Source Modification to:
Part 70 permit No.: T141-6023-00031

Dear Mr. Smith:

AM General Corporation was issued Part 70 operating permit T141-6023-00031 on February 25, 1999 for a military and commercial HUMMER production plant. An application to modify the source was received on March 11, 2003. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) One (1) new surface coating spray booth, identified as Booth 001b equipped with spray cup guns with compressed air capable of coating 26 units per hour, to replace surface coating now done in Booth 007 of the main Hummer I plant. This operation will consist of repair painting of metal parts.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the source modification has been issued. The source must comply with the requirements of 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12 before operation of any of the proposed emission units can begin.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

APD

cc: File - St. Joseph County
St. Joseph County Health Department
Northern Regional Office
Air Compliance Section Inspector - Rick Reynolds
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

**AM General Corporation
13200 McKinley Highway
Mishawaka, Indiana 46545**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification No.: 141-16912-00031	
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: June 10, 2003

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) new surface coating spray booth, identified as Booth 001b equipped with spray cup guns with compressed air capable of coating 26 units per hour, to replace surface coating now done in Booth 007 of the main Hummer I plant. This operation will consist of repair painting of metal parts.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Operation Conditions

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, the volatile organic compound (VOC) content of the coating used at the new Booth 001b shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for extreme performance coatings.

D.1.2 Minor Source Operating Limit [326 IAC 2-7-10.5(d)(5)]

- (a) The total single HAP input usage to Booth 001b shall be limited to less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit by Booth 001b shall make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.

During the first twelve (12) months of operation, the HAP input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 0.83 tons per month.

- (b) The total combined HAPs input usage to Booth 001b shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit by Booth 001b shall make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.

During the first twelve (12) months of operation, the HAP input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 2.083 total tons per month.

D.1.3 Volatile Organic Compounds (VOC) Limitations [326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-2, the total VOC input usage to the proposed Booth 001b shall be limited to 14 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this 14 tons per twelve (12) consecutive month limit by the proposed Booth 001b and the limit of less than 25 tons per twelve (12) consecutive month in Condition D.1.2_a (a) by the existing Zinc Rich Primer Coating Booth as permitted in MPM 141-1718 shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

During the first twelve (12) months of operation, the VOC input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 1.17 total tons per month.

Compliance Determination Requirements

D.1.4 Volatile Organic Compounds

Compliance with the VOC content and usage limitations contained in Condition D.1.1, D.1.2, and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the coating manufacturer. However, IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.5 Particulate Matter (PM) Overspray [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the proposed Booth 001b is subject to 326 IAC 6-3-2, which requires that the booth shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:
- (1) The source shall operate the control device in accordance with manufacturer's specifications.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.6 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D1.2, and D.1.3 the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D1.1 and D1.2.
- (1) The VOC and HAPs content of each coating material and solvent used.
- (a) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
- (b) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
- (2) The volume weighted VOC content of the coatings used for each month;
- (3) The cleanup solvent usage for each month;
- (4) The total VOC usage and HAP usage for each month; and
- (5) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of the issued Part 70 permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Source Modification No.: 141-16912-00031
Facility: Booth 001b
Parameter: Volatile Organic Compounds
Limit: The total VOC input usage to Booth 001b shall be limited to 14 tons per year tons per twelve (12) consecutive month period with compliance determined at the end of each month.

During the first twelve (12) months of operation, the VOC input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 1.17 total tons per month.

QUARTER _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Source Modification No.: 141-16912-00031
Facility: Booth 001b
Parameter: Single HAP and Combined HAPs
Limit: The total single HAP input usage to Booth 001b shall be limited to less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

During the first twelve (12) months of operation, the HAP input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 0.83 tons per month.

Combined HAPs input usage to Booth 001b shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

During the first twelve (12) months of operation, the HAP input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 2.083 total tons per month.

QUARTER _____ YEAR: _____

Month	Column 1		Column 2		Column 1 + Column 2	
	Single HAP This Month	Combined HAPs This Month	Single HAP Previous 11 Months	Combined HAPs Previous 11 Months	Single HAP 12 Month Total	Combined HAPs 12 Month Total
Month 1						
Month 2						
Month 3						

- 9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification

Source Background and Description

Source Name:	AM General Corporation
Source Location:	13200 McKinley Highway, Mishawaka, IN 46545
County:	St. Joseph
SIC Code:	3711
Operation Permit No.:	T 141-6023-00031
Operation Permit Issuance Date:	February 25, 1999
Minor Source Modification No.:	141-16912
Minor Permit Modification No.:	141-17407
Permit Reviewer:	Aida De Guzman

The Office of Air Quality (OAQ) has reviewed a modification application from AM General Corporation relating to the construction of the following emission units and pollution control devices:

- (a) One (1) new surface coating spray booth, identified as Booth 001b equipped with spray cup guns with compressed air capable of coating 26 units per hour, to replace surface coating now done in Booth 007 of the main Hummer I plant. This operation will consist of repair painting of metal parts.

History

On March 11, 2003, AM General Corporation submitted an application to the OAQ requesting to add an additional surface coating booth to their existing plant. AM General Corporation was issued a Part 70 permit on February 7, 1999.

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification and Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 11, 2003, with additional information received on March 28, 2003.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any

physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)	Limited Potential To Emit (tons/year)
PM	16.35	7.56
PM-10	16.35	7.56
SO ₂	0.0	0.0
VOC	30.26	14 *
CO	0.0	0.0
NO _x	0.0	0.0

HAP's	Potential To Emit (tons/year)	Limited Potential To Emit (tons/year)
Xylene	12.43	9
Toluene	3.83	
MIBK	10.97	
Cobalt	4.78	
Chromium	12.43	
Ethyl Benzene	1.91	
Methyl Isobutyl Ketone	10.97	
Worst Single HAP	12.43	<10
Combined HAPs	57.32	<25

Note: * AM General was issued a Minor Source Modification 141-17101 on March 12, 2003, which was limited to < 25 tons/year. To avoid the issue of PSD circumvention for the issued permit (141-17101) and this proposed permit (141-16912), since projects from both permits were proposed in a relatively short period of time, this proposed permit will be issued with a limit of 14 tons of VOC per year. Therefore, these two permits will have a combined limit of not more than 40 tons VOC per year to avoid 326 IAC 2-2, Prevention of Significant Deterioration.

Limiting the VOC input usage to restrict the VOC emissions to 14 tons per year will also restrict the PM/PM10 and HAPs emissions as follows:

$$\begin{array}{rcl}
 \text{PM/PM10 limit} & = & X \\
 & & \frac{16.35 \text{ tons PM/PM10/yr}}{30.26 \text{ tons VOC/yr}} = \frac{X}{14 \text{ tons VOC/yr}} \\
 X & = & 7.56 \text{ tons/yr}
 \end{array}$$

Justification for Modification

- (a) The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification under 326 IAC 2-7-10.5(d)(5), since the potential to emit volatile organic compound (VOC) is limited to 14 tons per year, which is less than 25 tons per year, but greater than 10 tons per year; or the single hazardous air pollutant (HAP) is limited to less than 10 tons per year; or the combined HAPs is limited to less than 25 tons per year.
- (b) The Part 70 Operating permit is being modified through a Part 70 Minor Permit Modification under 326 IAC 2-7-12(b), since the change does not qualify as an administrative amendment nor it qualifies under a significant permit modification.

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	not determined

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. St Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) St Joseph County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

Existing Source PSD or Emission Offset or Part 70 Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and limits. These emissions were taken from the MSM permit 141-17101-00031, issued on March 12, 2003, "Potential to emit of Modification After Issuance":

Pollutant	Emissions (tons/year)
PM	57.97
PM-10	42.07
SO ₂	0.5
VOC	<725.7
CO	64.42
NO _x	37.8
HAPs	484.55

- (a) This existing source is a major stationary source because at least one attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Proposed Modification (Booth 001b)	7.56	7.56	0.0	14	0.0	0.0	<10 single < 25 combined HAPs
PSD Significant Levels	25	15	40	40	100	40	-
Existing Source PTE	57.97	42.07	0.5	< 725.7	64.42	37.8	484.55
Source PTE After Issuance of the Modification	57.97	42.07	0.5	739.7	64.42	37.8	508.55

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

- (a) New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60)
 - (a) 40 CFR § 60.390, Subpart MM - Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations. This rule applies to each prime coat operation, each guide coat operation and each topcoat operation in an automobile and light duty truck assembly plant.

The proposed Booth 001b is not subject to this rule, as the HUMMER I vehicles being manufactured by the source are heavier than 3,850 kilograms (kg) (8,480 lbs), which is the weight of light duty trucks.
 - (2) There are no other NSPS applicable to this proposed modification.
- (b) National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63)
 - (1) There are no NESHAPs applicable to this proposed modification.

State Rule Applicability - Individual Facilities

- (a) 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration)
The proposed modification is not subject to this rule, as it does not emit VOC greater than 40 tons per year.
- (b) 326 IAC 8-2-2 (Surface Coating Automobile and Light Duty Truck Coating Operations)
This rule establishes emission limitation for automobile and light duty truck surface coating operation which includes all passenger car or passenger car derivatives capable of seating twelve (12) passengers and any motor vehicle rated at 3,864 kilograms (8,500 pounds) gross weight or less which are designed primarily for the purpose of transportation or are derivatives of such vehicles.

This rule is not applicable to the Booth 001b HUMMER I vehicle surface coating operations, because HUMMER I has a gross weight heavier than Light Duty Truck's weight of 3,864 kilograms (8,500 pounds). Therefore, HUMMER I is not categorized as a light duty truck.

- (c) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
The proposed Booth 001b is subject to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations). Pursuant to this rule the volatile organic compound (VOC) content of coating used at Booth 001b shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for extreme performance coatings.

The proposed Booth 001b is in compliance with this rule, as it emits 2.66 pounds per gallon less water, which is less than the limit of 3.5 pounds per gallon less water. See detailed emission calculations on Page 1 of 2 TSD Appendix A.

- (d) 326 IAC 6-3-2 (Process Operations)
The proposed Booth 001b is subject to 326 IAC 6-3-2, which requires that the booth shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:
(1) The source shall operate the control device in accordance with manufacturer's specifications.
- (e) 326 IAC 2-4-1-1 (New Source Toxic Control)
This rule applies to owner or operator who construct, reconstructs a major source of hazardous air pollutants (HAPs) after July 27, 1997. The proposed Booth 001b is not subject to this rule because it is not a major HAP emitting unit nor does it produce a final or intermediate product in and of itself.

Changes to the Part 70 Permit:

The following are the changes made to the Part 70 permit (changes are **bolded** and deletions are ~~struck through~~ for emphasis):

1. Section A.2 Emission Units and Pollution Control Equipment Summary is modified to include the above emission unit and be labeled as item (k):

- (k) **One (1) new surface coating spray booth, identified as Booth 001b equipped with spray cup guns with compressed air capable of coating 26 units per hour, to replace surface coating now done in Booth 007 of the main Hummer I plant. This operation will consist of repair painting of metal parts.**

The change to Section A.2 will also be reflected in Section D.1 project description table:

Facility Description [326 IAC 2-7-5(15)]

- (1) Surface coating booths of the following types:
(a) through (j) no changes

- (k) **One (1) new surface coating spray booth, identified as Booth 001b equipped with spray cup guns with compressed air capable of coating 26 units per hour, to replace surface coating now done in Booth 007 of the main Hummer I plant. This operation will consist of repair painting of metal parts.**

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicators of spray booths 001 - 009 shall

be limited to the following:

- (a) 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings; and
- (b) 4.3 pounds of VOCs per gallon of coating less water, for clear coatings.
- (c) The VOC limits in (a), (b) and (d) of this condition shall be determined on a daily-volume weighted average, using the following equation:

$$\frac{\text{lb VOC}}{\text{gallon less water}} = \frac{3 \text{ coatings } [Dc * O * Q / [1 - W * Dc / Dw]]}{3C}$$

Dc = density of coating, lb/gal
O = weight percent organics, %
W = percent volume water, %

Dw = density of water, lb/gal
Q = quantity of coating, gal/unit
C = total coatings used, gal/unit

- (d) Pursuant to 326 IAC 8-2-9, the volatile organic compound (VOC) content of the coating used at the Zinc Rich Primer Dip Booth, **and at the new Booth 001b** shall each be limited to 3.5 pounds of VOCs per gallon of coating less water, for extreme performance coatings.
2. The following condition will be amended to include the new Booth 001b, and change the typographical error of 0.083 ton/month to 0.83 ton/month:

D.1.2_a Minor Source Operating Limit [326 IAC 2-7-10.5(d)(5)]

- (a) The total VOC input usage to Zinc Rich Primer Dip Coating Booth shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit by the Zinc Rich Primer Dip Coating Booth shall make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.

During the first twelve (12) months of operation, the VOC input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 2.08 total tons per month.

- (b) The total single HAP input usage to Zinc Rich Primer Dip Coating Booth **and Booth 001b** shall **each** be limited to less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit by the Zinc Rich Primer Dip Coating Booth **and Booth 001b** shall make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.

During the first twelve (12) months of operation, the HAP input shall be limited such that the total usage divided by the accumulated months of operation shall **each** be less than 0.083 total tons per month.

- (c) Any change or modification which may increase the combined HAPs potential to emit to 25 tons per year or more from the **Zinc Rich Primer Dip Coating Booth** covered in this source modification will be subject to Significant Source Modification and must be approved by the Office of Air Quality (OAQ) before such change may occur.
- (d) **The total combined HAPs input usage to Booth 001b shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit by Booth 001b shall make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.**

During the first twelve (12) months of operation, the HAP input shall be limited such that the total usage divided by the accumulated months of operation shall be

less than 2.083 total tons per month.

3. The following condition D.1.3 will be amended to incorporate the new Booth 001b and to make the averaging time consistent.

D.1.3 Volatile Organic Compounds (VOC) Limitations [326 IAC 2-2]

- (a) Pursuant to CP141-5270, issued May 1, 1996, the total amount of VOC delivered to the coating applicator of booth 008 including clean up solvents, shall be limited to 3.25 tons per month **twelve consecutive month period with compliance determined at the end of each month.** This limitation will make 326 IAC 2-2 (PSD) not applicable.
- (b) Pursuant to CP141-5270, issued May 1, 1996 and Registration CP141-3332, issued January 10, 1994, the total amount of VOC delivered to the coating applicator of booth 009 including clean up solvents, shall be limited to 24 tons per **twelve consecutive month period with compliance determined at the end of each month.** Any change or modification that would cause potential emissions to be greater than 25 tons per year will require prior approval by OAM.
- (c) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), the booths 001-007, boilers 010-011, and insignificant degreasers shall have a limited potential to emit (PTE) VOC of 377 tons per ~~365 consecutive day period~~ **twelve consecutive month period with compliance determined at the end of each month.**
- (d) **Pursuant to 326 IAC 2-2, the total VOC input usage to the proposed Booth 001b shall be limited to 14 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this 14 tons per twelve (12) consecutive month limit by the proposed Booth 001b and the limit of less than 25 tons per twelve (12) consecutive month in Condition D.1.2_a (a) by the existing Zinc Rich Primer Coating Booth as permitted in MPM 141-17181 shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.**

During the first twelve (12) months of operation, the VOC input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 1.17 total tons per month.

4. Condition D.1.4 will be amended to include the new Booth 001b as follows:

D.1.4 Particulate Matter (PM) Overspray [326 IAC 6-3-2(c)]

- (a) The PM overspray from the nine (9) paint booths (001 - 009) shall not exceed the pound per hour emission rate established as E in the following formula:
- Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:
- $$E = 4.10 P^{0.67}$$
- where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour
- (b) The potential to emit (PTE) PM from spray booths 008 and 009 shall each be limited to 24 tons per year and the potential to emit (PTE) PM-10 shall be limited to 14 tons per year so that 326 IAC 2-2 (PSD) does not apply.
- (c) **Pursuant to 326 IAC 6-3-2 (Process Operations), the proposed Booth 001b is subject to 326 IAC 6-3-2, which requires that the booth shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:**

- (1) **The source shall operate the control device in accordance with manufacturer's specifications.**

5. Condition D.1.5 through D.1.10 no change

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.11 Record Keeping Requirements

-
- (a) To document compliance with Conditions D.1.1, D.1.2_a and D.1.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D1.1 and D1.2.
- (1) The amount and VOC content of each coating material and solvent used for emission units in items (a) through (i) **(k)**. The amount of VOC and HAP contents of the coating and solvent used for item (j) **and (k)**. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the dates of use;
- (3) For emission units in items (a) through (i) **(k)**, the volume weighted VOC content of the coatings applied for each day; If a coating greater than 3.5 pounds of VOC per gallon of coating less water for forced air dried coatings, or 4.3 pounds of VOC per gallon of coating less water for clear coatings is used, compliance shall be based on the following equation for daily volume weighted average:
- $$\frac{\text{lb VOC}}{\text{gallon less water}} = \frac{3 \text{ coatings } [Dc * O * Q / [1 - W * Dc / Dw]]}{3C}$$
- Dc = density of coating, lb/gal Dw = density of water, lb/gal
O = weight percent organics, % Q = quantity of coating, gal/unit
W = percent volume water, % C = total coatings used, gal/unit
- (4) The cleanup solvent usage for each day;
- (5) The total VOC usage for each day from emission units in items (a) through (i). and the total VOC and HAP usages for each month from emission unit in items (j) **and (k)**; and
- (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.10, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

6. The following Reporting Forms will be amended to incorporate the new Booth 001b:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Source Modification No.: 141-16912-00031
Facility: Zinc Rich Primer Dip Booth and **Booth 001b**
Parameter: Volatile Organic Compounds
Limit: Zinc Rich Primer Dip Booth shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
During the first twelve (12) months of operation, the VOC input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 2.08 total tons per month.

Booth 001b shall be limited to 14 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
During the first twelve (12) months of operation, the VOC input shall be limited such that the total usage divided by the accumulated months of operation shall be less than 1.17 total tons per month.

QUARTER _____ YEAR: _____

Month	Column 1		Column 2		Column 1 + Column 2	
	Booth 001b Usage This Month	Zinc Rich Primer Dip Booth This Month	Booth 001b Usage Previous 11 Months	Zinc Rich Primer Dip Booth Previous 11 Months	Booth 001b Usage 12 Month Total	Zinc Rich Primer Dip Booth 12 Month Total
Month 1						
Month 2						
Month 3						

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Source Modification No.: 141-16912-00031
Facility: Zinc Rich Primer Dip Booth **and Booth 001b**
Parameter: **Single HAP only for Zinc Rich Primer Dip Booth; Single and Combined HAPs for Booth 001b**
Limit: Zinc Rich Primer Dip Coating Booth **and Booth 001b** shall **each** be limited to less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

During the first twelve (12) months of operation, the HAP input shall be limited such that the total usage divided by the accumulated months of operation shall **each** be less than 0.083 total tons per month.

Combined HAPs input usage to Booth 001b shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

During the first twelve (12) months of operation, the HAP input to Booth 001b shall be limited such that the total usage divided by the accumulated months of operation shall be less than 2.083 total tons per month.

QUARTER _____ YEAR: _____

Month	Column 1			Column 2			Column 1 + Column 2		
	Booth 001b Single HAP Usage This Month	Booth 001b Combined HAPs Usage This Month	Zinc Rich Primer Dip Booth Single HAP Usage This Month	Booth 001b Single HAP Usage Previous 11 Months	Booth 001b Combined HAPs Usage Previous 11 Months	Zinc Rich Primer Dip Booth Single HAP Previous 11 Months	Booth 001b Single HAP Usage 12 Month Total	Booth 001b Combined HAPs Usage 12 Month Total	Zinc Rich Primer Dip Booth Single HAP 12 Month Total
Month 1									
Month 2									
Month 3									

- 9 **No deviation occurred in this quarter.**
9 **Deviation/s occurred in this quarter.**
 Deviation has been reported on: _____

Submitted by: _____ **Signature:** _____
Title / Position: _____ **Date:** _____
Phone: _____

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 **Minor Source Modification No. 141-16912-00031, and Minor Permit Modification 141-17407-00031.**

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Page 1 of 2 TSD App A

Company Name: AM General Corporation
Address City IN Zip: 13200 McKinley Highway, Mishawaka, IN 46545
CP: 141-16912
Pit ID: 141-00031
Reviewer: Aida De Guzman
Date Application Received: Mar. 11, 2003

HUMMER I New Paint Booth 001b		Date Application Received: Mar. 11, 2003																
Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Summation Coatings	Transfer Efficiency	
Aliphatic Poly. Chemical Agent	10.9	31.60%	0.0%	31.6%	0.0%	31.00%	0.07690	26.000	3.45	3.45	6.90	165.58	30.22	16.35	11.13	0.20242233	75%	
CARC 1k Black	10.1	33.80%	0.0%	33.8%	0.0%	52.30%	0.07690	26.000	3.41	3.41	6.83	163.81	29.90	14.64	6.53	0.21651503	75%	
Aliphatic Polyurethane (tan)	10.4	33.10%	0.0%	33.1%	0.0%	50.80%	0.07690	26.000	3.46	3.46	6.91	165.82	30.26	15.29	6.80	0.21203099	75%	
Retarder	8.8	40.00%	0.0%	40.0%	0.0%	56.70%	0.00154	26.000	3.50	3.50	0.14	3.36	0.61	0.23	6.17	0.00512615	75%	
Hi Heat Green (KalCor)	11.2	30.50%	0.0%	30.5%	0.0%	0.00%	0.01923	26.000	3.41	3.41	1.70	40.92	7.47	4.25	ERR	0.0488567	75%	
Hi Heat Black (KalCor)	11.8	28.59%	0.0%	28.6%	0.0%	0.00%	0.01923	26.000	3.38	3.38	1.69	40.55	7.40	4.62	ERR	0.04579715	75%	
Hi Heat Tan (KalCor)	11.1	30.60%	0.0%	30.6%	0.0%	0.00%	0.03846	26.000	3.40	3.40	3.40	81.59	14.89	8.44	ERR	0.09803377	75%	
Yellow Dust	10.4	30.10%	0.0%	30.1%	0.0%	54.30%	0.01923	26.000	3.13	3.13	1.57	37.57	6.86	3.98	5.77	0.04821846	75%	
Accelerator - Yellow Dust (Catalyst)	7.3	0.00%	0.0%	0.0%	0.0%	100.00%	0.00154	26.000	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0	75%	

0.32993

0.87700058

Note: Only 1 coat can be used at a time, therefore, the worst emitter coating will be considered in determining the PTE.

State Potential Emissions

Add worst case coating to all solvents

Vol . Weighted Average

2.66

165.82

30.26

16.35

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Page 2 of 2 TSD AppA

Company Name: AM General Corporation
Address City IN Zip: 13200 McKinley Highway, Mishawaka, IN 46545
CP#: 141-16912
Plt ID: 141-00031
Permit Reviewer: Aida De Guzman
Date: Mar. 11, 2003

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % MIBK	Weight % Ethyl Benzene	Weight % Cobalt	Weight % Chromium	Weight % MIK	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Cobalt Emissions (ton/yr)	Chromium Emissions (ton/yr)	MIK Emissions (ton/yr)
Aliphatic Poly. Chemical Agent -Greener	10.9	0.07690	26.000	13.00%	4.00%	5.00%	2.00%	5.00%	13.00%	5.00%	12.43	3.83	4.78	1.91	4.78	12.43	4.78
CARC 1k Black	10.1	0.07690	26.000	9.00%	4.00%	5.00%	2.00%	0.00%	0.00%	0.00%	7.96	3.54	4.42	1.77	0.00	0.02	0.00
Aliphatic Polyurethane (tan)	10.4	0.07690	26.000	2.00%	4.00%	12.00%	0.00%	0.40%	0.00%	12.00%	1.83	3.66	10.97	0.00	0.37	0.00	10.97
Retarder	8.8	0.00154	26.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hi Heat Green (KalCor)	11.2	0.01923	26.000	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.22	1.22	0.00	0.00	0.00	0.00	0.00
Hi Heat Black (KalCor)	11.8	0.01923	26.000	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.29	1.29	0.00	0.00	0.00	0.00	0.00
Hi Heat Tan (KalCor)	11.1	0.03846	26.000	5.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	2.43	0.00	0.00	0.00	0.00	0.00
Yellow Dust	10.4	0.01923	26.000	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.23	0.00	0.00	0.00	0.00	0.00	0.00
Accelerator - Yellow Dust (Catalyst)	7.3	0.00154	26.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Only 1 coating can be used at a time, therefore, the worst emitter coating will be considered in determining the PTE.

Total State Potential Emissions

Worst Single HAP
Combined HAPs

12.43	3.83	10.97	1.91	4.78	12.43	10.97
12.43						
57.32						

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs